EP Energy – Uinta Basin Wellpad Inspections On-Site Partial Compliance Evaluations (PCE)

Inspection Report Date:

Inspection Report Prepared By:

2/21/2019 Joe Wilwerding, Cindy Beeler

Inspection Report Reviewed By:

Scott Patefield, Director

EPA Inspectors:

Joe Wilwerding, Cindy Beeler, NEIC

Company Representatives:

None. Observations made from facility perimeter.

Tribal Representatives:

None

Parent Company Name:

EP Energy E&P Company, L.P.

Parent Company Address:

PO Box 4660

Houston, Texas 77210-4660

Facilities County/State Location:

Uintah, Utah

EPA Region:

Region 8

Reservation & Tribe:

Uintah & Ouray Reservation, Ute Indian Tribe

Specific Facility Information:

See Table 1

Table 1 - Facility Information						
Site	GMAP Filename	Inspection Date	Lat	Long	ICISID	
LB UTE 1-13A3	180728_ST03	7/28/2018	40.39846323	-110.1685983	080000004904701103	
MONSEN 2-27A3	180728_ST04	7/28/2018	40.36502226	-110.2155193	080000004904701104	
CONOVER 3-3B3	180728_ST05	7/28/2018	40.34222111	-110.2136126	080000004904701105	
COOK 4-14B3	180728_ST06	7/28/2018	40.31457908	-110.1844512	080000004904701106	
DWR 3-22C6	180801_ST05	8/1/2018	40.20957331	-110.5546842	080000004904701107	
WOLLMAN 2-23C4	180807_ST08	8/7/2018	40.35326345	-109.96449315	080000004904701142	

Inspection Information

As part of a regional effort to assess emissions from tanks and operation of combustion devices, EPA inspectors visited several EP Energy well pads in the Uinta Basin in Utah. Audio, visual, and olfactory (AVO) notations were made, and a forward-looking infrared (FLIR) camera was used to perform optical gas imaging (OGI), from the perimeter of each of the sites. In addition, EPA's National Enforcement Investigation Center (NEIC) conducted Geospatial Measurement of Air Pollution (GMAP) and other air measurements during the Region 8 inspections. The purpose of the inspections was to better understand emissions and their sources from wellpad production facilities and assess if tank vapors are routed completely to their intended control device if present.

The EPA inspectors adhered to the following approach for the site inspections:

- 1. Park the NEIC GMAP vehicle in a general downwind location from the site.
- 2. Begin collecting GMAP and other air measurement data.
- 3. From the site perimeter,
 - a. Take photos and videos of the site operations in both visual and infrared modes (auto, manual, and/or high-sensitivity modes);
 - b. Make notations on the number of each major type of site operation or equipment present (e.g., is the site producing, number of separators, total number of tanks, number of oil tanks, number of water tanks, number of tank emission control devices); and
 - c. Make notations of AVO and/or OGI indications of emissions, unlit flares/combustors/control devices, and other environmental impacts.
- 4. Finish collecting GMAP and other air measurement data.

Roughly 2 weeks prior to the inspections, Region 8 personnel notified company and Utah Department of Air Quality representatives that inspections would be performed. Region 8 inspectors contacted tribal representatives approximately two months prior to the start of inspections, as well as during the inspection period, to discuss inspection scope and outcomes.

Table 2 documents the primary equipment observed onsite at each location by EPA inspectors, as well as whether indications existed, such as pump jack movement or heater/treater heat plumes, that the site was currently receiving materials produced from associated wells. Note, without access on site, the number of tanks tabulated as "oil" versus "water" may be in error as the tanks may not have been labelled or the label illegible from the edge of the wellpad.

Table 2 – Observed Site Characteristics During Inspection						
Site	LB UTE 1- 13A3	MONSEN 2-27A3	CONOVER 3-3B3	COOK 4- 14B3	DWR 3- 22C6	WOLLMAN 2-23C4
Inspection Date	7/28/2018	7/28/2018	7/28/2018	7/28/2018	8/1/2018	8/7/2018
Pump Jack Operation or Other Operating Indication	No rotoflex movement	No rotoflex movement	No rotoflex movement	No rotoflex movement	Heater treater heat plume	Pump jack not operating
# Wells	1	1	1	1	1	1
Wells Info	rotoflex	rotoflex	rotoflex	rotoflex	NA	NA
# Separators	1	1	1	1	1	1
# Total Tanks	4	8	4	4	4	3
# Oil Tanks	3	NA	3	3	3	3
# Water Tanks	1	NA	1	1	1	1
# CVS Knockout Tanks	1	NA	NA	NA	1	NA
# Control Devices	1	1	1	1	1	1
Control Device Info	Enclosed combustor	Enclosed combustor	Enclosed combustor	Enclosed combustor	Enclosed combustor	Enclosed combustor

Table 3 lists Areas of Concern identified by EPA inspectors during the inspection. The Areas of Concern table includes emissions or other operational issues noted by the inspectors, the method of detection used by the inspectors, and photo and/or video files associated with any visual-spectrum or optical gas imaging performed of the activity or emissions source. Areas of Concern could be potential noncompliance issues.

Table 3 – Areas of Concern						
Site	Equipment or Location	AVO Observation Details	OGI Emissions Observed?	OGI Observation Details	Additional Observation Notes	Picture/Video File ID(s)
DWR 3-22C6	Combustor	No visible refraction	No	No heat plume or signature observed.		8/1/2018 - 1749
DWR 3-22C6	Water Tank	HC (hydrocarbon) odors	Yes	Emissions from water tank flame arrestor vent.		8/1/2018 - 1748
WOLLMAN 2- 23C4	Overall site	Strong HC odor	Yes	Conventional/HSM site scan. Auto- mode tank thief hatch emissions significant.	Tank emissions not making it to combustor	8/7/2018 - 1748
WOLLMAN 2- 23C4	Tanks		Yes	Auto-mode tank venting (front), significant	Tank emissions not making it to combustor	8/7/2018 - 1750
WOLLMAN 2- 23C4	Pump Jack, Tanks		No	HSM pump jack. HSM/Auto-mode tanks - significant venting from (left) end tank	Tank emissions not making it to combustor. Conventional-mode site scan. Combustor behind tanks.	8/7/2018 - 1749

Attachment 1 lists the photos and videos made at each site to document facility operations.

Attachment 1

Photo/Video Log					
Site	Date	Photographer	File ID	Description	
LB UTE 1-13A3	7/28/2018	J. Wilwerding	0352	Overview and no emissions. Functioning combustor.	
LB UTE 1-13A3	7/28/2018	J. Wilwerding	0353	Overview and no emissions. Functioning combustor.	
MONSEN 2-27A3	7/28/2018	J. Wilwerding	0354	Overview and no emissions. Functioning combustor.	
CONOVER 3-3B3	7/28/2018	J. Wilwerding	0355	Overview and no emissions. Functioning combustor.	
COOK 4-14B3	7/28/2018	J. Wilwerding	0356	Site sign	
COOK 4-14B3	7/28/2018	J. Wilwerding	0357	Site sign	
COOK 4-14B3	7/28/2018	J. Wilwerding	}	Site overview and HSM. No emissions, and no indications of any operations or combustor on.	
DWR 3-22C6	8/1/2018	J. Wilwerding	1747	Overview	
DWR 3-22C6	8/1/2018	J. Wilwerding	1748	Water tank emissions	
DWR 3-22C6	8/1/2018	J. Wilwerding	1749	Combustor showing no heat plume	
WOLLMAN 2- 23C4	8/7/2018	C. Beeler	1748	Conv. Site scan/HSM/Auto emissions on top of tank	
WOLLMAN 2- 23C4	8/7/2018	C. Beeler	3	Conv. Site scan/HSM/Auto emissions on top of tank - thief hatch on far-left tank	
WOLLMAN 2- 23C4	8/7/2018	C. Beeler	1750	Auto-mode thief hatch emissions (significant) on tank	